# S. A. Skinner,

## Fountain Pen.

No 30935. Patented Dec 18 1860

Fig. 1

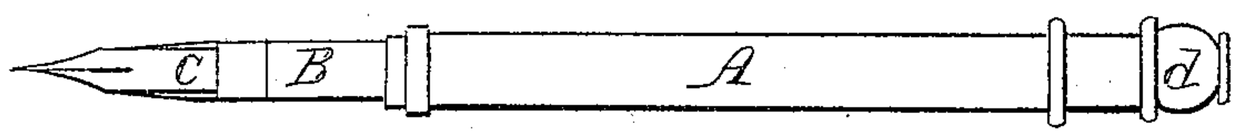



Fig. 3

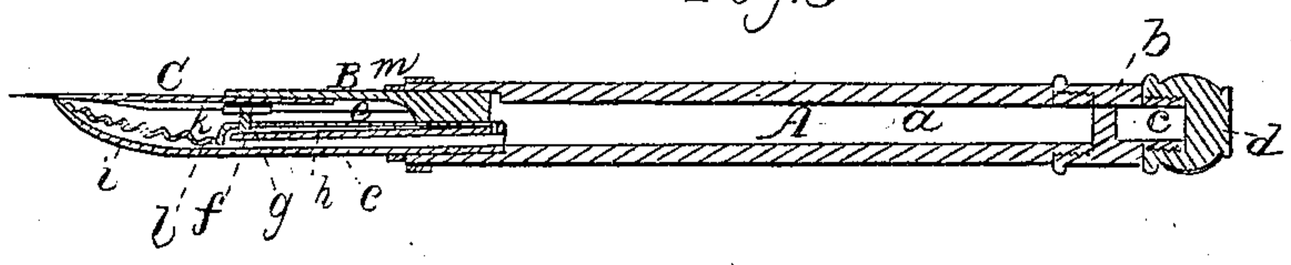



Fig. 2

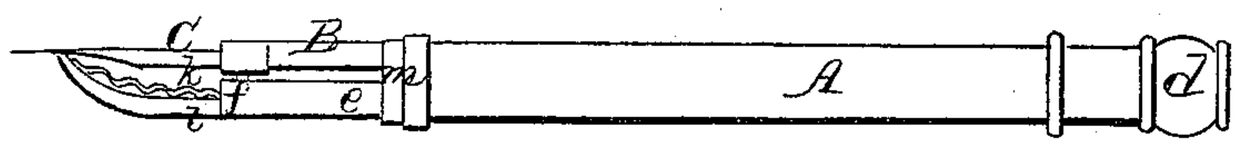
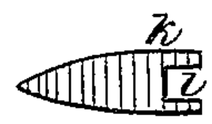



Fig. 4




Witnesses

Geo. C. Ellsworth

Ebenezer Mead

Smith A Skinner

# UNITED STATES PATENT OFFICE.

SMITH A. SKINNER, OF WEST BERKSHIRE, VERMONT.

## IMPROVEMENT IN FOUNTAIN-PENS.

Specification forming part of Letters Patent No. **30,935**, dated December 18, 1860.

*To all whom it may concern:*

Be it known that I, SMITH A. SKINNER, of West Berkshire, in the county of Franklin and State of Vermont, have invented an Improved Fountain-Pen Holder; and I do hereby declare that the same is fully described and represented in the following specification and the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, and Fig. 3 a longitudinal section, of it.

In such drawings, A denotes the pen-handle constructed tubular and with a reservoir *a* for holding the ink. The upper end of the said reservoir is closed, with the exception of a small hole *b* made through it near its edge and for the purpose of an air-inlet and to open a communication between the reservoir *a*, and an ink-retaining or saving-chamber *c*, arranged with reference to the reservoir *a* and covered by a screw-cap *d*, as shown in the drawings. The chamber *c* constitutes a receptacle to intercept any ink which may flow out of the air-hole *b* when the pen-handle may be in a horizontal position, such ink being caused to return into the fountain or reservoir whenever the handle A may be elevated into a vertical or nearly vertical position.

B is the pen-carrier, which is a socketed spring formed of vulcanized india-rubber, or any other suitable material, and attached to the fountain, so as to lie alongside of the lower part or branch *e* thereof. The said part B receives and carries the writing-pen C and supports a conical valve *f*, that is made to project from it at a right angle or thereabout and through a hole *g*, formed through the upper side of the part *e*, hereinbefore described. The said hole *g* is a valve-seat and opening for the valve *f*, which is extended through the hole and against a long spring *h*, which I term the "agitator," it being arranged within the branch part *e* of the ink-fountain in such manner as to be moved by the valve during the movements of the latter. The purpose of the spring *h* is to agitate or stir the ink in order to prevent the same from depositing sediment within the branch *e*, or in case any sediment may have been so deposited the agitator when put in movement will serve to agitate or remix the sediment with the liquid or ink. The branch *e* terminates in a spoon or spout *i*, that is extended toward the pen C, as shown in the drawings. The spoon serves to conduct the ink to the pen and is furnished with a corrugated tongue *k*, which projects from the branch *e*. The said tongue is corrugated transversely, and near where it is joined to the part *e* it is formed with a hole or passage *l*, the same being in order to allow the ink that may pass out of the valve-opening *g* to flow into the spoon *i*. By corrugating the tongue (a top view of it being represented in Fig. 4) it is enabled to retain the ink to better advantage in the spoon *i* or prevent it from too freely flowing out of the same than would be the case were the said tongue *k* not corrugated. A ring *m* is slipped over or made to embrace the two parts B *e*. By moving this ring either toward or away from the pen C the elasticity of the spring B will be either increased or diminished, or the said part B will be rendered more or less stiff in action in order to accommodate it to the pressure which may be exerted on the pen either for fine or heavy writing. While writing with the said pen the valve *f* will be open or put in motion more or less during each heavy downward stroke of the pen, and thus the flowage of the ink out of the reservoir *a* of the handle will be produced by the act of writing with the pen.

From the above it will be seen that the valve *f* is entirely separate from the agitator *h* and is affixed to and combined with a spring or elastic pen-carrier B, which is so placed alongside of and over the branch *e* as to cause the said valve and branch to be against or directly under the concave or inner side of the pen. The advantage of this arrangement with respect to one wherein the valve is attached to or extended directly from the agitator and against the upper or convex surface of the pen is that in the latter the closing of the valve is dependent on the correct action of the agitator, whereas in my improvement such is not the case, as the valve is worked by the spring pen-carrier B, which is entirely outside of and separate from the branch *e*, and not liable to have its correct action impaired, as is the case with that of the agitator, by deposits of solid matters, which may be made within the branch. Furthermore, my improvement causes the ink to be applied di-

rectly to the inner surface of the pen instead of against its outer surface.

I do not claim the combination of a spring or agitator with the pen or its carrier and the ink-fountain provided with a valve-opening to receive a branch or valve extended from the agitator; nor do I claim so arranging the agitator with respect to the pen that the valve of the former shall rest against the convex side or back of the pen.

I claim—

1. The combination and arrangement of a valve *f*, separate from the agitator *h*, with a spring pen-carrier B, arranged with respect to the agitator *h* and the branch *e*, provided with a valve-opening and extended from the ink-fountain, as described.

2. The improved mode of making the spring-tongue *k*, viz., with corrugations, the same being for the purpose described.

SMITH A. SKINNER.

Witnesses:

GEO. E. ELLSWORTH,

EBENEZER WELD.